AI as Public Infrastructure for Citizens and Businesses – Inclusive Ai and Accessibility

Seasonal School in Digital Transformation 2025

Artificial Intelligence & Machine Learning for Public Administration

29 September - 2 October 2025, Skopje, North Macedonia

Miodrag Vujković

The $4.4 Trillion Question

Why Should Governments Provide AI Infrastructure?

- AI will generate $2.6-4.4 trillion in annual economic value
- Countries with AI infrastructure will see 15% additional GDP growth over next decade
- Without public action: Benefits concentrate among large corporations
- With public infrastructure: Broad-based prosperity and innovation

Key Question: Will AI be a luxury good or essential infrastructure?

Today's Journey

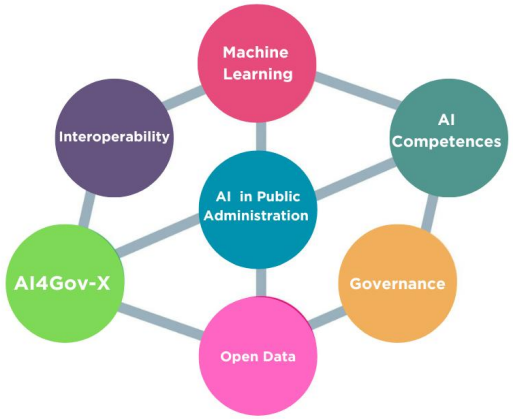
Part I: Historical Precedents
- How public infrastructure created economic growth
- Lessons from railroads to the internet

Part II: Economic Theory
- Why markets fail in AI provision
- Theoretical foundations for public investment

Part III: Global Examples
- Current models from EU, Asia, Americas
- Southeast Europe opportunities

Part IV: Implementation Framework
- Building inclusive AI infrastructure
- Practical policy roadmap

Conclusion: Call to Action



PART I: HISTORICAL PRECEDENTS

How Public Infrastructure Created Economic Growth

Learning from History

Every transformative technology required public infrastructure investment:

- Railroads: Coordination and standards
- Electricity: Universal service
- Highways: Scale economics
- Telecommunications: Network effects
- Space: Patient capital
- Internet: From public research to commercial platform

Lesson: Markets alone never delivered transformative infrastructure

The Railroad Revolution

1860s: The Coordination Challenge
The Problem:

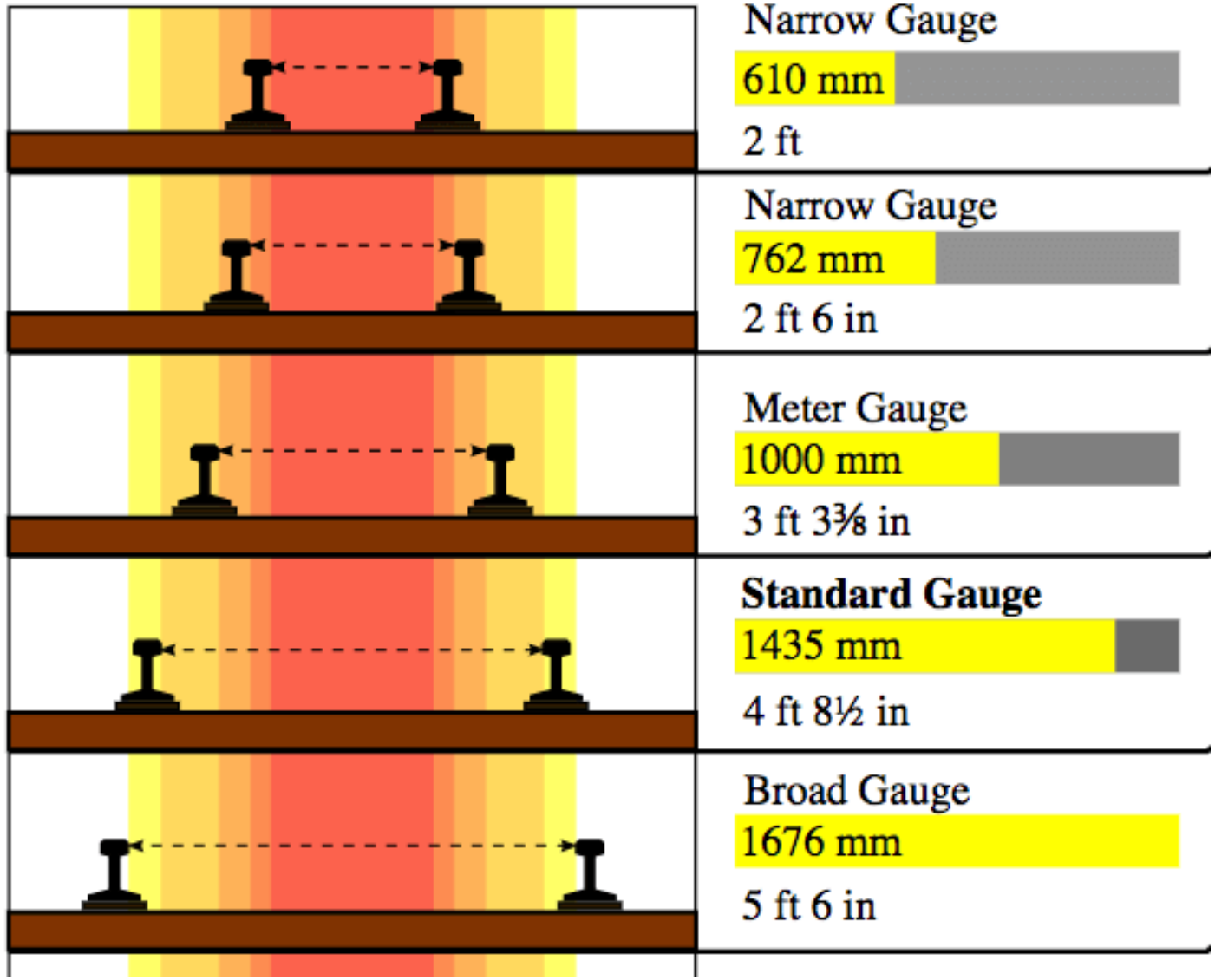
- Multiple private companies, incompatible track gauges
- No coordination across regions
- Network benefits unrealized

Government Solution:

Pacific Railway Acts (1862-1864)

- Standardized track gauges
- Land grants and financing
- Transcontinental coordination

Result: Foundation for industrial economy


Narrow Gauge
610 mm
2 ft
Narrow Gauge
762 mm
2 ft 6 in
Meter Gauge
1000 mm
3 ft 3⅜ in
Standard Gauge
1435 mm
4 ft 8½ in
Broad Gauge
1676 mm
5 ft 6 in

Railroad Economic Impact

Returns on Public Investment

Current Economic Contribution:

- $233.4 billion annual economic output
- Every $1 invested generates $2.50 in economic activity
- Each railroad job creates 3.9 additional jobs

Lessons for AI:

- Standards and interoperability are essential
- Network effects require coordination
- Public investment enables private innovation
- Geographic reach matters for equity

Electricity - The Universal Service Revolution

1935: Rural Electrification
Market Failure:

- 90% of rural America without electricity
- Private utilities: "unprofitable to serve"
- Urban-rural divide growing

Rural Electrification Administration:

- Low-interest loans
- Technical assistance
- Rural electric cooperatives
- Universal service obligations

Today: 42 million Americans still served by these cooperatives

Electricity's Economic Transformation

Universal Access = Universal Prosperity Economic Impact:

- $1.50 economic activity per $1 invested
- Manufacturing decentralization enabled
- Agricultural productivity revolution
- New industries created

AI Parallel:

- Large corporations have AI access
- SMEs and rural areas lack capabilities
- Public infrastructure can bridge divide
- Universal AI access = competitive economy

The Interstate Highway System

1956: Platform for Innovation Investment Model:

- $128.9 billion total cost
- Highway Trust Fund (dedicated revenue)
- 90% federal, 10% state funding
- 50-year development horizon

Economic Returns:

- $283 billion additional economic output
- Multipliers of 1.5-8.0x
- 4x effectiveness during recessions
- Platform for entire industries (FedEx, Walmart, Amazon)

Highway Infrastructure Lessons

Scale, Coordination, and Spillovers
Key Success Factors:

- Large-scale coordinated investment
- Long-term commitment (decades)
- Clear federal-state cost sharing
- Open access for all users

Modern Applications:

- Just-in-time manufacturing
- E-commerce logistics
- Suburban development
- Interstate commerce

AI Infrastructure needs similar scale and coordination

Telecommunications Network Effects

Natural Monopoly to Universal Service Evolution:

- 1876-1913: Fragmented private networks
- 1913-1984: Regulated monopoly with universal service
- 1934: Universal Service Fund established
- Today: $7.4 billion annual USF disbursements

Network Economics:

- Value increases with users (n^2 effect)
- Natural monopoly characteristics
- Cross-subsidization required
- Standards and interoperability crucial

Persistent Digital Divide

Despite Decades of Investment Current Gaps:

- 6-9% urban-rural internet access gap
- 42% of small businesses lack AI expertise
- $21 billion annual economic impact of divide

Why Markets Fail:

- High fixed costs in low-density areas
- Positive externalities not captured
- Network effects create winner-take-all
- Path dependence locks in inequality

AI divide risks being even more severe

Space Program - Patient Capital

High Risk, High Reward Public Investment NASA Investment Rationale:

- Private markets wouldn't fund
- 20-40 year payback periods
- Uncertain commercial applications
- National security imperatives

Economic Returns:

- $75.6 billion economic output (FY2023)
- 304,803 jobs supported
- 2,000+ spinoff technologies
- $2-40 return per $1 invested

Space Technology Spillovers

Unforeseeable Benefits Technologies Created:

- GPS (entire location economy)
- Satellite communications
- Weather forecasting
- Materials science
- Computer miniaturization
- Medical devices

AI Parallel:

- Similar high costs, uncertain returns
- Spillover potential enormous
- Patient capital required
- Public investment justified

Internet - From ARPANET to Economy

Public Research → Commercial Revolution
Government Foundation:

- DARPA: ARPANET (1969)
- NSF: Academic networks (1980s)
- TCP/IP protocols (public domain)
- Open standards mandate

Economic Transformation:

- Trillions in annual economic activity
- Entire new industries created
- Platform for innovation
- Democratic access to information

Model for AI infrastructure transition

Historical Lessons Summary

Consistent Patterns Across Technologies When Government Investment Succeeds:

- Network effects require coordination
- Market failures prevent optimal investment
- Universal access is policy goal
- Spillover benefits exceed private returns
- High risks deter private capital
- Natural monopoly characteristics exist

Economic Multipliers:

- Short-term: 1.5-3.0x
- Medium-term: Up to 8.0x
- Long-term: Transformation of entire economy

AI exhibits ALL these characteristics

ECONOMIC THEORY FOUNDATION

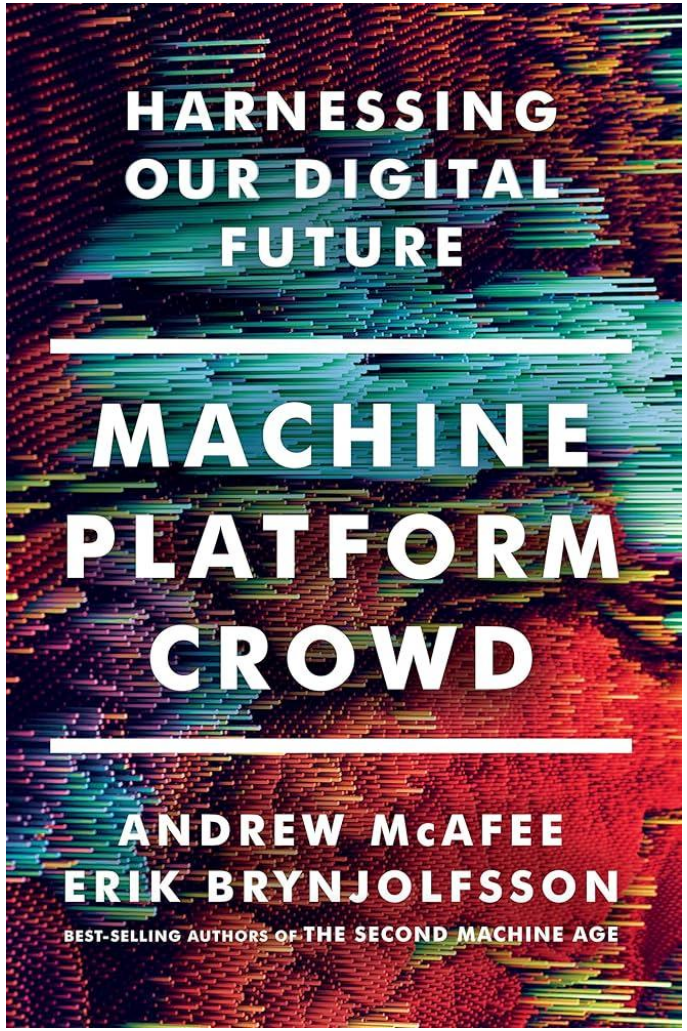
Why Government Must Provide AI Infrastructure

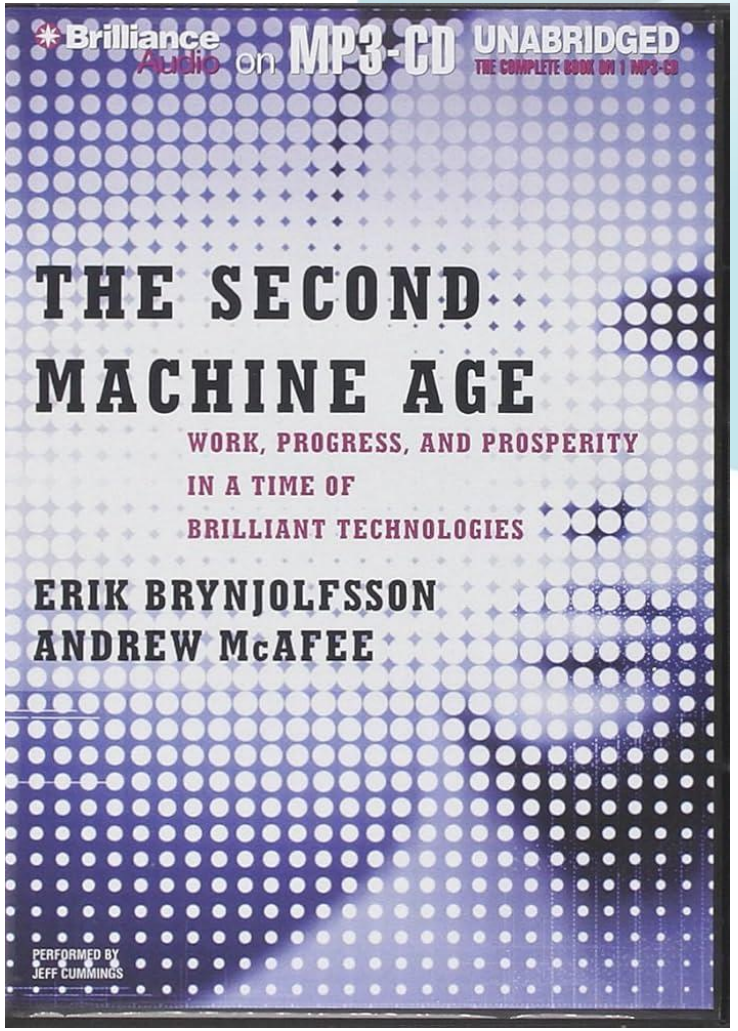
Theoretical Foundations

Leading Economists on Technology & Infrastructure:

- Erik Brynjolfsson: Productivity paradox and complementary investments
- Mariana Mazzucato: Entrepreneurial state and mission-oriented innovation
- Daron Acemoglu: Technology direction and inequality
- Ethan Mollick: Human-AI collaboration
- Carlota Perez: Technological revolutions and deployment
- Paul David: Path dependence and standards

Erik Brynjolfsson





Brynjolfsson's Productivity Paradox

Why AI Isn't Boosting Growth… Yet
The J-Curve Pattern:

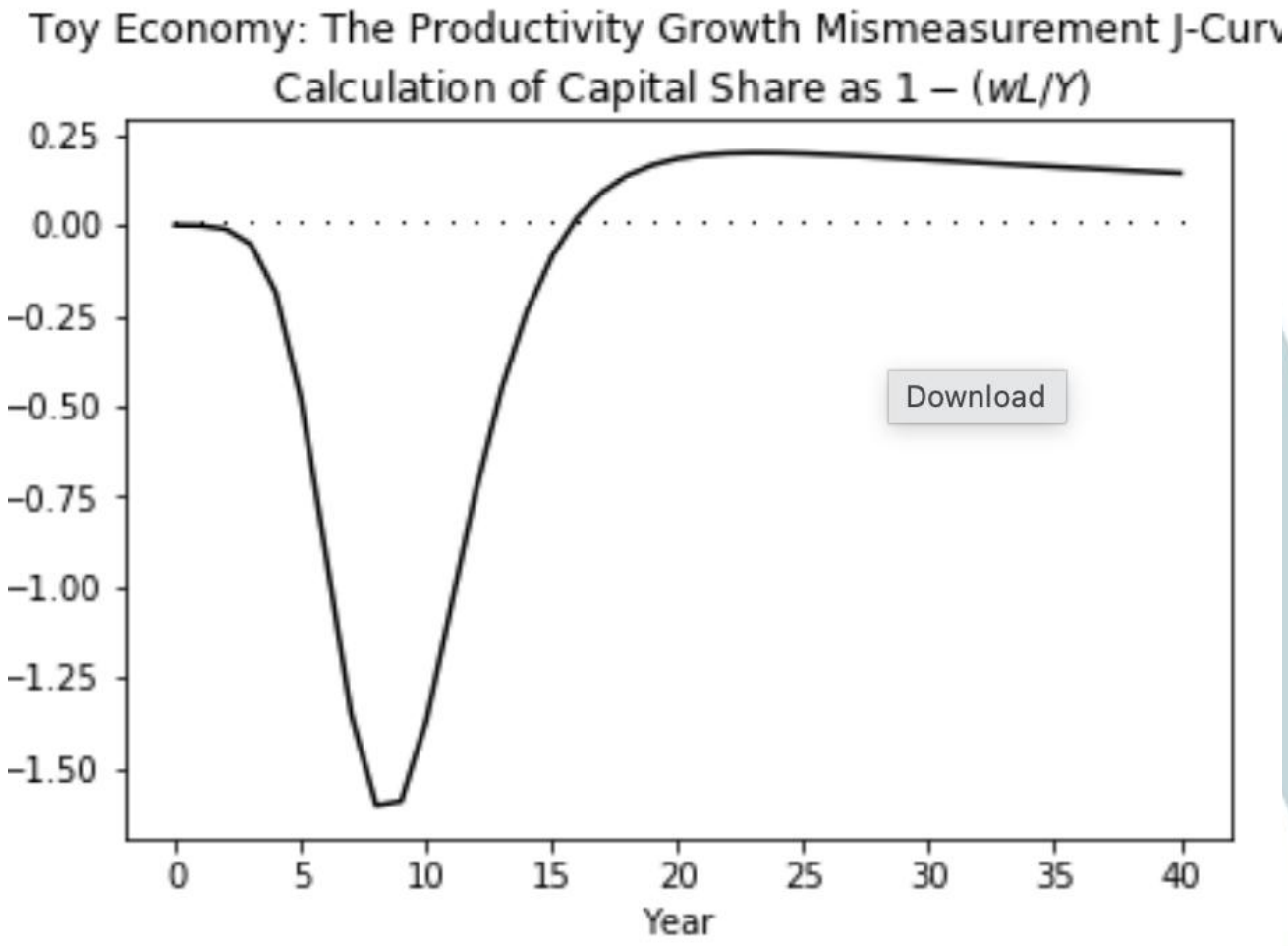
- New technologies initially DECREASE productivity
- Complementary investments required
- Organizational change takes time
- Then exponential gains

Current Evidence:

- 15-50% firm-level productivity gains
- But no economy-wide impact yet
- Estimated 0.55-0.71% TFP growth without complementary investments

Erik Brynjolfsson

J Curve



The Complementary Investment Challenge

Technology Alone Is Never Enough Required Complementary Assets:

- Organizational capital and new processes
- Skills training and workforce development
- Digital infrastructure and data systems
- Institutional frameworks and standards

Market Failure:

- Benefits spill over to competitors
- No single firm captures full returns
- Coordination problems prevent investment
- Result: Suboptimal productivity gains

Solution: Public infrastructure provides shared foundation

Brynjolfsson's Policy Framework

Coordinating Complementary Investments Government Role:

- Provide shared computing resources
- Establish data standards
- Fund training programs
- Create institutional frameworks

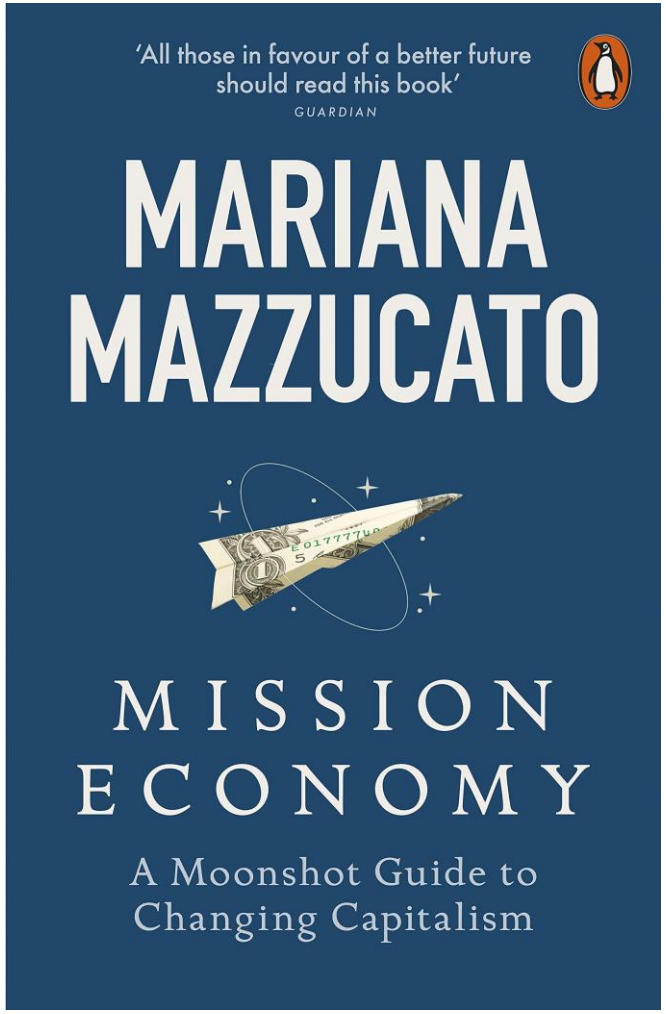
Network Externalities:

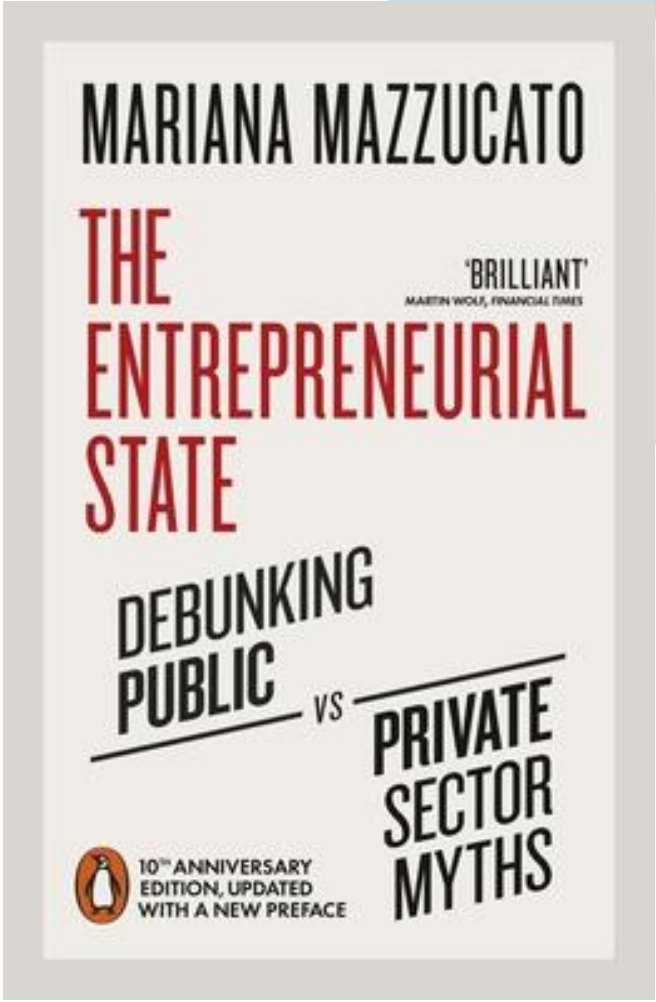
- AI value increases with users
- Private provision = fragmented networks
- Public provision = coordinated standards

Policy Implication:

Countries investing in infrastructure PLUS complementary assets will see 10x higher returns

Mariana Mazzucato





Mazzucato's Entrepreneurial State

Government as Market Creator, Not Just Fixer
Core Thesis:

- State is "investor of first resort"
- Government creates entirely new markets
- Private innovation builds on public foundation

Evidence from iPhone:
Every core technology from government research:

- Internet (DARPA)
- GPS (Military)
- Touchscreen (CIA/NSF)
- Voice recognition (DARPA)
- Battery technology (DOE)

AI's Public Research Foundation

Today's AI Built on Government Investment
Public Funding Created:

- Neural networks (NSF, 1950s-present)
- Machine learning algorithms (DARPA)
- Internet infrastructure (ARPANET)
- Computing hardware (military contracts)
- University research (continuous funding)

- Commercialization and scaling
- Application development
- User interface design
- Business model innovation

Both essential, but public investment comes first

Mission-Oriented Innovation for AI

Beyond Market Failure to Market Shaping Grand Challenges Approach:

- Climate AI: Modeling and optimization
- Healthcare AI: Diagnosis and drug discovery
- Education AI: Personalized learning
- Inclusive AI: Serving all communities

Value Creation vs. Extraction:

- Current AI risks "rent extraction"
- Private gains without social benefit
- Public infrastructure ensures value sharing

Pre-distribution Better Than Redistribution:

Share benefits from the start, not after inequality created

Mazzucato's AI Policy Framework

Active Market Shaping
Patient Capital:

- Government provides long-term investment
- Accept delayed returns private markets won't
- Fund foundational research and infrastructure

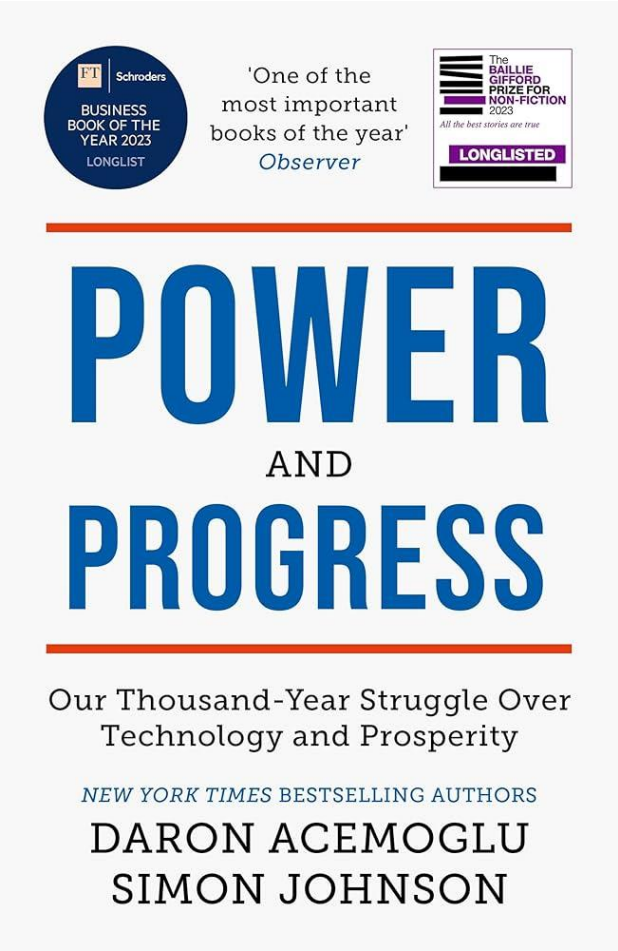
Procurement Power:

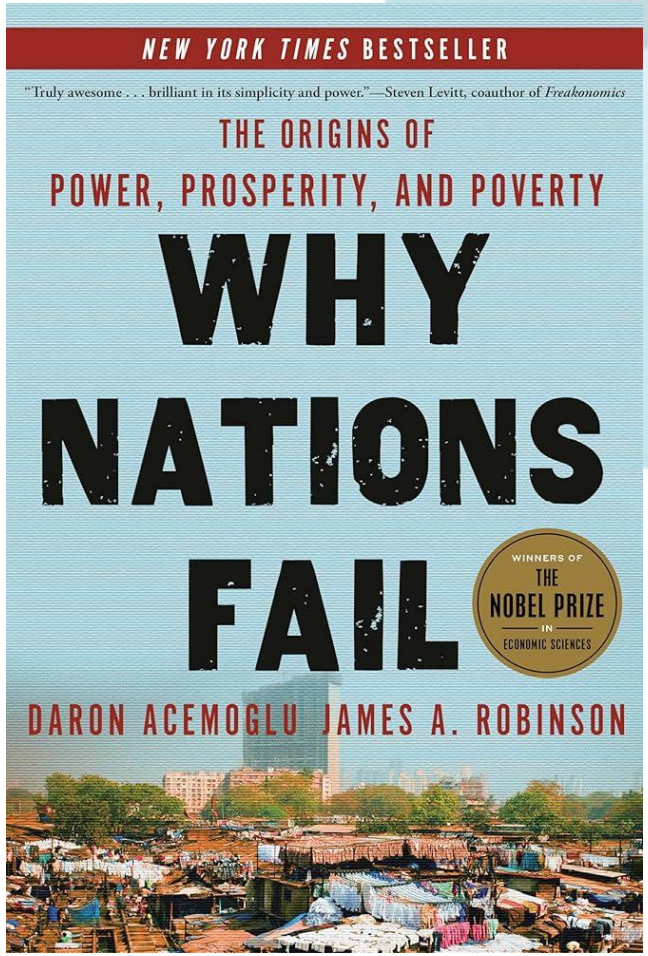
- Government as major AI user
- Shape development through purchasing
- Require inclusive and ethical AI

Market Creation:

- Don't just fix failures
- Actively create beneficial markets
- Direct innovation toward public good

Daron Acemoglu





Acemoglu on Technology Direction

AI Impact on Inequality Is Not Predetermined

Task-Based Model:

- Technologies can automate (replace workers)
- Or augment (enhance workers)
- Current incentives favor automation

"So-So Automation" Problem:

- Replaces workers without major productivity gains
- Creates inequality without shared prosperity
- Example: Self-checkout vs. assisted checkout

Key Insight: Policy shapes technology direction

Acemoglu's Institutional Framework

Redirecting AI Toward Human Complementarity

Research Priorities:

- Medical AI assisting doctors
- Educational AI enhancing teachers
- Manufacturing AI augmenting workers
- Creative AI amplifying human creativity

Policy Tools:

- Tax incentives for augmenting AI
- Research funding priorities
- Procurement requirements
- Regulatory frameworks

Economic Impact:

- Human-complementary AI raises wages
- Creates new tasks and jobs
- Enables shared prosperity

Inequality and Public AI Infrastructure

Democratizing Access to AI Capabilities
Current Concentration:

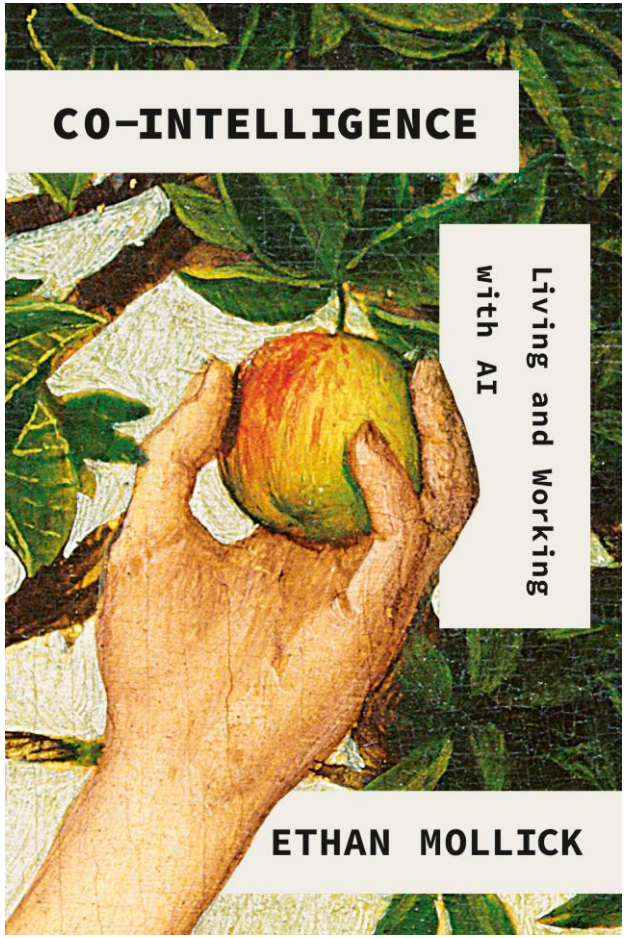
- Large firms have unlimited AI access
- SMEs cannot afford capabilities
- Rural areas lack infrastructure
- Developing regions left behind

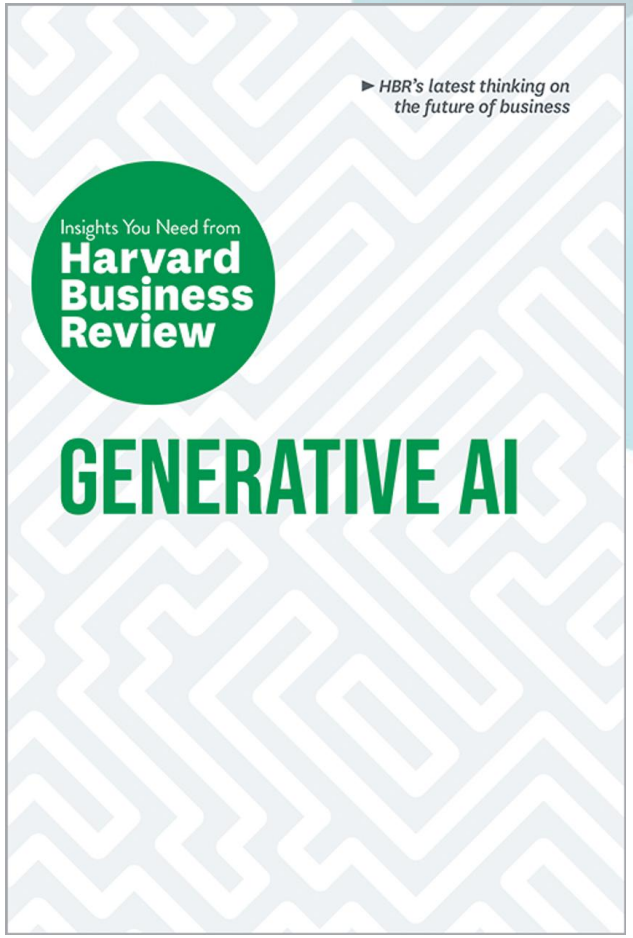
Public Infrastructure Solution:

- Universal access to basic AI services
- Shared computing resources
- Open-source models and tools
- Technical assistance programs

Result: Innovation and prosperity broadly shared

Ethan Mollick





Mollick's Co-Intelligence Framework

Human-AI Collaboration, Not Replacement Partnership Model:

- AI as "collaborative partner"
- Different strengths combined
- Human judgment + AI capability

Jagged Technological Frontier:

- AI superhuman at some tasks
- Poor at others
- Requires experimentation to find optimal uses

Implementation Challenge:

- Most organizations don't know how to use AI
- Experimentation is expensive
- Learning benefits others

Democratic AI Access Benefits

Mollick's Research on Equality
Key Finding:
AI can REDUCE inequality between high and low performers

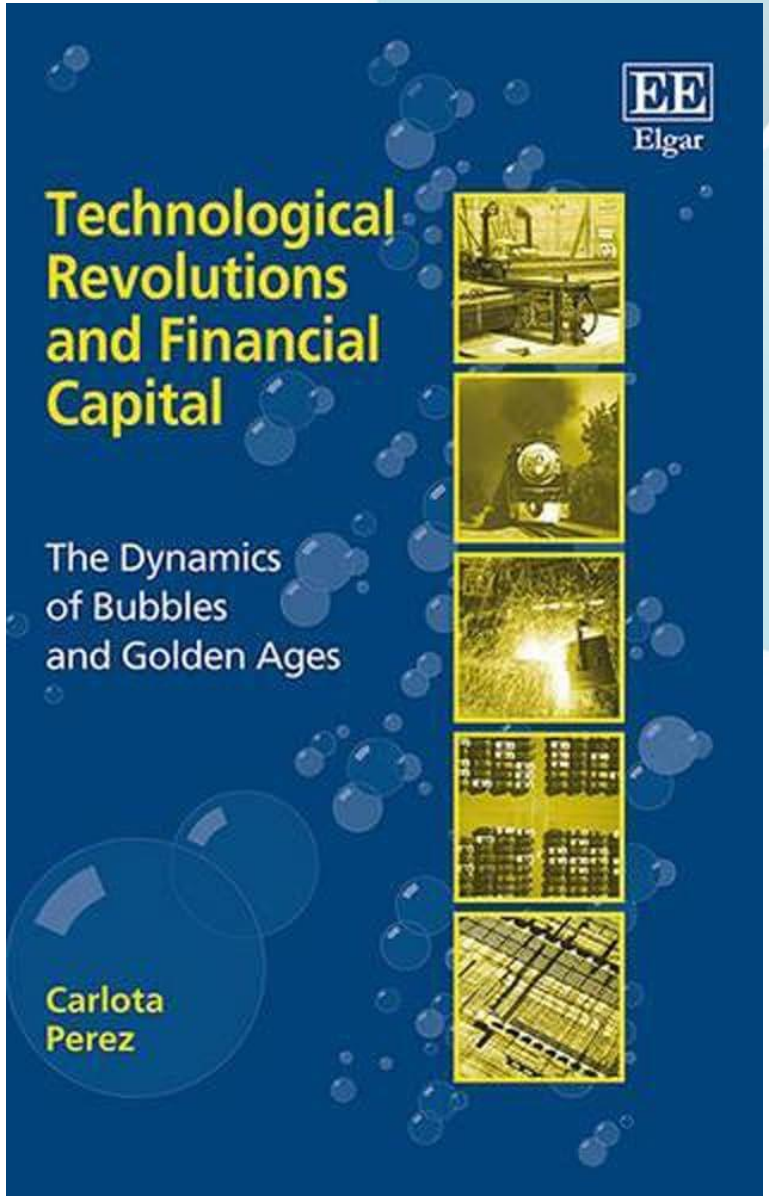
When AI Access Is Broad:

- Low performers gain most
- Performance gaps narrow
- Innovation democratized
- Small businesses can compete

When AI Access Is Limited:

- Elite organizations pull further ahead
- Inequality increases
- Innovation concentrated
- Market concentration accelerates

Carlota Perez



Perez's Technological Revolution Framework

Where Are We in the AI Revolution?
The Great Surge Model:

- Installation Period (speculation, bubbles)
- Turning Point (crisis and rethinking)
- Deployment Period (golden age)

Current Status:

- We're in Installation Period
- Financial speculation dominates
- Winner-take-all dynamics
- Disconnect from real economy

Transition Requirement:
Patient public investment to reach Deployment

From Installation to Deployment

Public Investment Enables Golden Age Installation Period Problems:

- Speculation and bubbles
- Inequality and concentration
- Limited real economy benefits

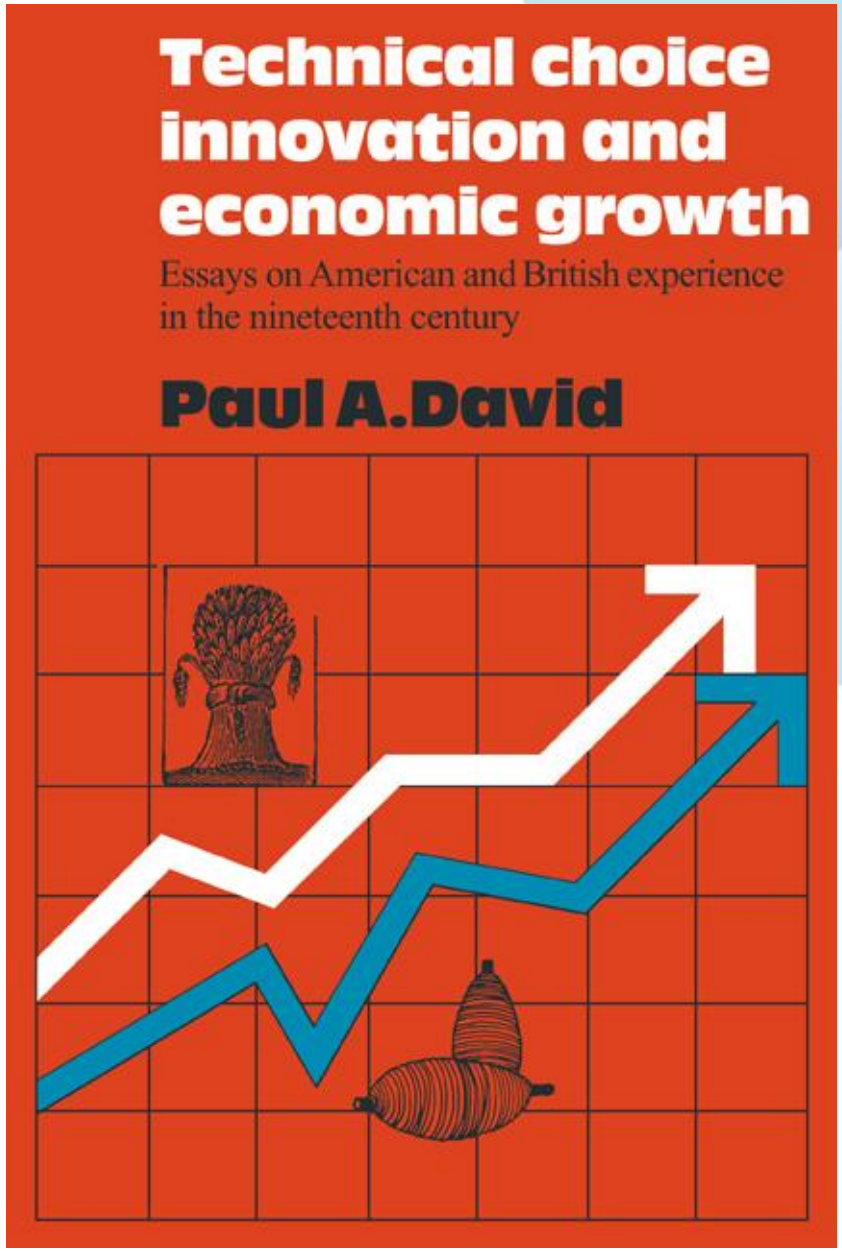
Deployment Period Benefits:

Broad-based prosperity
Productivity gains realized
New institutional frameworks
Sustainable growth

Historical Examples:

- Railroads: 1840s speculation → 1870s growth
- Electricity: 1920s speculation → 1950s prosperity
- Internet: 1990s bubble → 2000s transformation

Paul David


Technical choice
innovation and
economic growth
Essays on American and British experience
in the nineteenth century
Paul A.David

Path Dependence and Lock-In

Paul David: Why Early Choices Matter
The QWERTY Problem:

- Suboptimal standard becomes locked in
- Network effects prevent change
- Switching costs too high

AI Path Dependence Risks:

- Proprietary standards dominate
- Vendor lock-in prevents competition
- Optimal solutions cannot emerge
- Innovation stifled

Public Infrastructure Solution:

- Set open standards early
- Ensure interoperability
- Prevent lock-in
- Enable competition

Theoretical Convergence

All Frameworks Point Same Direction Unanimous Agreement:

- Market failures are systematic, not exceptional
- Public investment enables private innovation
- Early action is critical
- Complementary investments essential
- Human-centered development possible
- Universal access achievable

Economic Returns:

- Short-term multipliers: 1.5-3x
- Long-term transformation: 10-15% GDP growth
- Shared prosperity vs. concentration

CURRENT GLOBAL EXAMPLES

Models and Lessons

Learning from Global Leaders

Coverage:

- European Union: Regulatory leadership
- France: Mission-oriented approach
- Germany: Industrial integration
- Nordic: Regional cooperation
- Asia-Pacific: Comprehensive strategies
- Americas: Research excellence

Key Question: What models work best?

EU - Regulatory Leadership

First-Mover Advantage in AI Governance AI Act:

- World's first comprehensive AI regulation
- Risk-based approach
- Global standard-setting power
- "Brussels Effect" on worldwide development

Investment Commitment:

- €200 billion AI Continent Action Plan (April 2025)
- Coordinated across 27 member states

Balance: Innovation with protection

EU Infrastructure Development

Coordinated Continental Approach AI Factories Network:

- Shared computing resources
- Distributed across regions
- Academic and commercial access
- Energy-efficient design

Digital Single Market:

- AI capabilities across borders
- Data sharing frameworks
- Preventing fragmentation
- Scale advantages

AI4EU Platform:

- €20 million investment
- 79 institutes
- 21 countries
- Shared research infrastructure

France - Mission-Oriented Strategy

€2.5 Billion National Commitment
Three-Phase Approach:

- Research structuring (foundation)
- Innovation acceleration (applications)
- Strategic deployment (economy-wide)

France 2030 Targets:

- €1.5 billion public funding (2022-2027)
- Double AI specialists by 2030
- 3 institutions in global top 50
- Sovereign AI capabilities

Key Infrastructure:

- Jean Zay supercomputer (36.85 petaflops)
- Health Data Hub
- Industrial AI platforms

French Public-Private Success

Leveraging Public Investment
Health Data Hub:

- Secure medical data platform
- Privacy-compliant innovation
- Public-private collaboration
- Accelerated medical AI development

Private Investment Attracted:

- Data center development
- Built on public framework
- Job creation and growth

Lesson: Public investment attracts private capital

Germany - Industrial AI Focus

€5 Billion Federal Investment
Strategic Goals:

- 10% AI-based economic output by 2030
- Maintain manufacturing leadership
- Integrate with Industry 4.0
- Support Mittelstand companies

Infrastructure Development:

- 12 AI Centers of Excellence
- GAIA-X data infrastructure (with France)
- NVIDIA AI Factories partnership
- Industrial cloud platforms

SME Support:

- 600+ AI startups supported
- Technical assistance programs
- Funding and training

Nordic Model - Regional Excellence

Cooperation Multiplies Impact
Nordic AI Centre (2024):

- Sweden, Finland, Denmark, Norway
- Shared infrastructure costs
- Combined expertise
- Regional scale advantages

2030 Vision:

- Nordic-Baltic digital leadership
- Shared standards and systems
- Cross-border services
- Innovation ecosystem

X-Road Platform:

- Estonia-Finland-Iceland
- Interoperable services
- Proven technical feasibility

Nordic Country Innovations

Small Countries, Big Impact

Estonia:

- 99% government services digital
- AI integration across all services
- E-residency global reach
- Population 1.3 million leading globally

Finland:

- AuroraAI life-events approach
- Citizen-centric services
- 1% GDP for R&D
- Elements of AI course (750,000 participants)

Denmark:

- National AI strategy
- Public sector adoption focus
- Green AI initiatives

Singapore Smart Nation 2.0

Comprehensive Whole-of-Government Approach

Investment:

- S$120 million AI adoption fund
- Digital Infrastructure Act (2025)
- National AI Strategy refresh

Key Features:

- Ministry of Digital Development coordination
- AI across ALL government services
- Regulatory innovation
- Public-private integration

Results:

- Global AI hub status
- Talent attraction
- Innovation ecosystem
- Economic growth

South Korea's New Deal

76 Trillion Won Transformation Korean New Deal ($62 billion):

- AI-5G convergence central
- Digital infrastructure backbone
- Data economy development
- Green and digital together

Governance:

- Presidential AI Committee
- Highest political priority
- Cross-ministry coordination
- AI Framework Act (2nd globally)

Industrial Integration:

- Chaebols and startups
- Manufacturing and services
- Export-oriented development

Canada - Research Excellence

World's First National AI Strategy (2017)
Investment Phases:

- Phase 1: $125 million (2017)
- Phase 2: $443 million (current)
- Budget 2024: $2.4 billion ecosystem
- AI Compute Fund: $2 billion

Tri-Institute Model:

- CIFAR coordination
- Amii (Alberta)
- Mila (Montreal)
- Vector (Toronto)

Distributed excellence beats centralization

Australia - Practical Implementation

From Strategy to Delivery
National AI Approach:

- Strategy for 2025 release
- Mandatory government AI policy
- Responsible AI framework

Key: Focus on adoption, not just innovation

Adopt Program:

- $3-5 million grants
- Regional center focus
- SME support priority
- Practical implementation

Global Lessons Summary

What Works in AI Infrastructure Success Factors:

- High-level political commitment
- Multi-year funding certainty
- Clear governance structure
- Public-private partnership
- International cooperation
- Focus on adoption and inclusion

Infrastructure Requirements:

- Computing capacity (supercomputers)
- Data governance frameworks
- Skills development programs
- Regulatory clarity
- Open standards

Every successful country invests publicly

POLICY IMPLEMENTATION FRAMEWORK

Building AI Infrastructure for All

From Theory to Practice

Implementation Components:

- Governance structure
- Investment models
- Universal access framework
- Workforce development
- Market failure corrections
- International cooperation

Key Challenge: Balancing innovation with inclusion

Governance Architecture

New Institutional Forms Required National AI Coordination Authority:

- Cabinet-level status
- Cross-agency mandate
- Independent oversight
- Long-term planning authority

Multi-Stakeholder Model:

- Government leadership
- Private sector input
- Civil society participation
- Academic expertise
- Community representation

National AI Authority Functions

Core Responsibilities
Strategic Planning:

- National AI infrastructure roadmap
- Technology assessment and foresight
- Standards development
- International negotiations

Resource Coordination:

- Budget allocation across agencies
- Public-private partnership management
- Grant and subsidy programs
- Performance monitoring

Safety and Oversight:

- AI safety evaluations
- Bias and fairness auditing
- Privacy protection
- Security standards

Investment Architecture

Sustainable Financing Model
Public Investment Needs:

- $10-20 billion annually
- 0.5-1% of GDP
- Similar to other infrastructure
- Long-term commitment required

Revenue Sources:

- Infrastructure bonds (20-30 year)
- Digital services taxation
- AI productivity dividend capture
- Public-private revenue sharing

Multiplier Effects:

- Every $1 public generates $2-3 private
- Short-term: 1.5-3x economic return
- Long-term: Transformative growth

Tiered Service Model

Sustainable Universal Access Service Tiers:

Basic (Free):

- Essential AI services
- Education applications
- Healthcare support
- Government services

Standard (Subsidized):

- Small business tools
- Research access
- Non-profit organizations

Premium (Market Rate):

- Advanced commercial services
- High-compute applications
- Custom development

Cross-subsidization enables universal access

Universal Access Infrastructure

Reaching Every Citizen and Business Technical Requirements:

- Works on basic devices
- Low bandwidth capable
- Offline functionality
- Mobile-first design

Delivery Channels:

- Public libraries
- Schools and universities
- Community centers
- Mobile service units
- Online platforms

Support Systems:

- Technical assistance
- Training programs
- Multilingual services
- Accessibility features

SME Support Framework

Democratizing AI for Small Business

AI Adopt Centers:

- 5+ regional centers initially
- Technical training
- Implementation support
- Peer learning networks
- Cost-sharing programs

Graduated Support:

- Free pilots (3-6 months)
- Subsidized transition (50-75% subsidy)
- Technology Reinvestment Accounts
- Procurement preferences

Integration:

- Existing business services
- Industry associations
- Chambers of commerce

Rural and Underserved Access

Bridging the AI Divide
Rural Strategy:

- Rural AI innovation hubs
- Agricultural AI applications
- Telehealth enablement
- Distance education support
- Economic diversification

Infrastructure Solutions:

- Edge computing deployment
- Satellite connectivity
- Mobile coverage expansion
- Community access points

Local Capacity Building:

- Train local support staff
- Partner with rural organizations
- Adapt to local needs

Workforce Development Strategy

Managing the AI Transition Education Pipeline:

- AI literacy curriculum
- Community college programs
- University partnerships
- Adult education initiatives
- Professional certification

Transition Support:

- Income support during retraining
- Job placement assistance
- Career counseling
- Entrepreneurship programs

Public Sector Leadership

Government as Model User
Systematic Deployment:

- All agencies adopt AI tools
- Productivity improvements tracked
- Best practices documented
- Lessons shared publicly

Workforce Development:

- Train all government employees
- Create AI specialist roles
- Performance incentives
- Knowledge sharing programs

Demonstration Effect:

- Show practical benefits
- Build public confidence
- Create demand for skills

Addressing Market Failures

Where Public Provision Is Essential

Computing Infrastructure:

- Government data centers
- Shared GPU clusters
- Research computing
- Startup access programs

Data Infrastructure:

- Public datasets
- Secure sharing platforms
- Privacy-preserving tools
- Interoperability standards

R&D Investment:

- Basic research funding
- High-risk innovation
- Open-source development
- Technology transfer

Competition and Innovation Policy

Preventing Monopolization Regulatory Framework:

- Interoperability mandates
- Data portability rights
- API standardization
- Anti-monopoly enforcement

Public Option:

- Government AI services
- Competitive alternative
- Price discipline
- Quality benchmark

Innovation Incentives:

- Open-source requirements
- Patent pools
- Technology sharing
- Startup support

International Cooperation Framework

Building Global AI Infrastructure Allied Partnerships:

- Shared infrastructure development
- Joint research programs
- Standard harmonization
- Talent exchange

Development Cooperation:

- Technology transfer
- Capacity building
- Training programs
- Infrastructure support

Global Governance:

- UN AI frameworks
- OECD principles
- ISO standards
- Trade agreements

Immediate Action Steps

Next 6 Months
Assessment Phase:

- Commission national AI readiness study
- Map existing capabilities and gaps
- Identify priority sectors and regions
- Calculate investment requirements

Stakeholder Engagement:

- Launch national consultation
- Engage business associations
- Academic partnerships
- Civil society input

Legislative Preparation:

- Draft AI Infrastructure Act
- Budget allocation proposals
- Governance framework

Medium-Term Development

Years 1-2
Institutional Launch:

- Establish AI Authority
- Initial budget ($1-2 billion)
- Recruit leadership team
- Set performance targets

Infrastructure Development:

- First computing centers
- Pilot programs (3 regions)
- Basic service launch
- Standards adoption

Early Results:

- Government adoption
- SME pilots
- Training programs
- Public awareness

Long-Term Vision

5-10 Year Horizon Transformation Goals:

- Universal AI access achieved
- 15% GDP growth realized
- Global leadership position
- Innovation ecosystem thriving

Societal Impact:

- Reduced inequality
- Enhanced public services
- Competitive businesses
- Empowered citizens

Legacy:

Building the foundation for 50 years of prosperity

The Choice Before Us

Two Possible Futures

Without Public AI Infrastructure:

- AI becomes luxury good
- Winner-take-all dynamics
- Increasing inequality
- Economic stagnation for most
- Democratic challenges

With Public AI Infrastructure:

- Universal access and opportunity
- Broad-based innovation
- Shared prosperity
- Competitive economy
- Democratic empowerment

Which future will we choose?

Learning from Electricity

The Perfect Historical Parallel
1930s Rural Electrification:

- 90% of rural areas without power
- Private companies: "unprofitable"
- Government action changed everything
- Universal access achieved
- Economic transformation followed

2020s AI Access:

- Most SMEs without AI capabilities
- Big Tech: "not our market"
- Government action needed NOW
- Universal access achievable
- Economic transformation awaits

Will we repeat success or failure?

The Innovation Argument

Public Infrastructure Enables Private Innovation

Historical Evidence:

- Internet → Amazon, Google, Facebook
- GPS → Uber, mapping, logistics
- Touch screens → Smartphones
- Government research → Private products

AI Future:

- Public infrastructure → Thousands of innovations
- Open access → Entrepreneurship explosion
- Shared resources → Startup success
- Democratic access → Diverse solutions

Public investment multiplies private innovation

The Equity Imperative

Technology for All, Not Just Elites

Current Trajectory:

- Large corporations dominate
- Urban centers benefit
- Wealthy individuals access
- Others left behind

Public Infrastructure Alternative:

- Every business can compete
- Rural areas included
- All citizens empowered
- Opportunity democratized

This is about the kind of society we want to be

The Competitiveness Case

National Economic Survival
Global Reality:

- AI will determine economic winners
- Countries without infrastructure will fall behind
- Digital sovereignty at stake
- Innovation ecosystems require foundation

Competitive Advantage Through:

- Early infrastructure investment
- Skilled workforce development
- Innovation ecosystem creation
- International partnerships

Act now or become economically irrelevant

Addressing Skeptics

Common Objections Answered

"Too Expensive"

- ROI of 3-8x documented
- Costs less than highway system
- Self-financing through growth

"Private Sector Can Do It"

- 100 years of infrastructure history says no
- Market failures are systematic
- Universal access never achieved privately

"Government Can't Innovate"

- Internet, GPS, touchscreens disagree
- Government creates, private scales
- Both needed for success

The Implementation Reality

We Know How to Do This
Proven Models Exist:

- EU regulatory framework
- Singapore's comprehensive approach
- Canada's research excellence
- Nordic cooperation model

Technology Is Ready:

- Cloud infrastructure mature
- AI models available
- Standards emerging
- Talent growing

Political Will Is All That's Missing

Call to Action - Policymakers

Your Historic Opportunity
You Can Be the Generation That:

- Built AI infrastructure for all
- Enabled decades of prosperity
- Reduced inequality
- Strengthened democracy
- Led global transformation

Or the Generation That:

- Missed the AI revolution
- Allowed inequality to explode
- Lost economic competitiveness
- Failed future generations

History will judge your choice

Call to Action - Economists

Your Analysis Matters
Research Priorities:

- Document market failures
- Calculate multiplier effects
- Design optimal policies
- Measure outcomes
- Share evidence

Policy Engagement:

- Advise governments
- Public communication
- Media engagement
- Academic consensus building

Your voice can shape the debate

Call to Action - Business Leaders

Support Public Infrastructure
Why Business Should Support:

- Levels playing field
- Reduces your costs
- Expands markets
- Enables innovation
- Provides skilled workforce

How to Engage:

- Public advocacy
- Partnership participation
- Investment commitment
- Political support

Public infrastructure helps your business

Call to Action - Citizens

Demand AI Infrastructure Your Future Depends on This:

- Job opportunities
- Economic prosperity
- Service quality
- Democratic participation
- Children's future

How to Act:

- Contact representatives
- Join consultations
- Support initiatives
- Demand action

This is YOUR infrastructure

The Moment of Decision

Why Now Is Critical Windows Closing:

- Path dependence setting in
- Private monopolies forming
- International competition intensifying
- Inequality accelerating

Opportunities Available:

- Technology maturing
- Models proven
- Funding accessible
- Public support growing

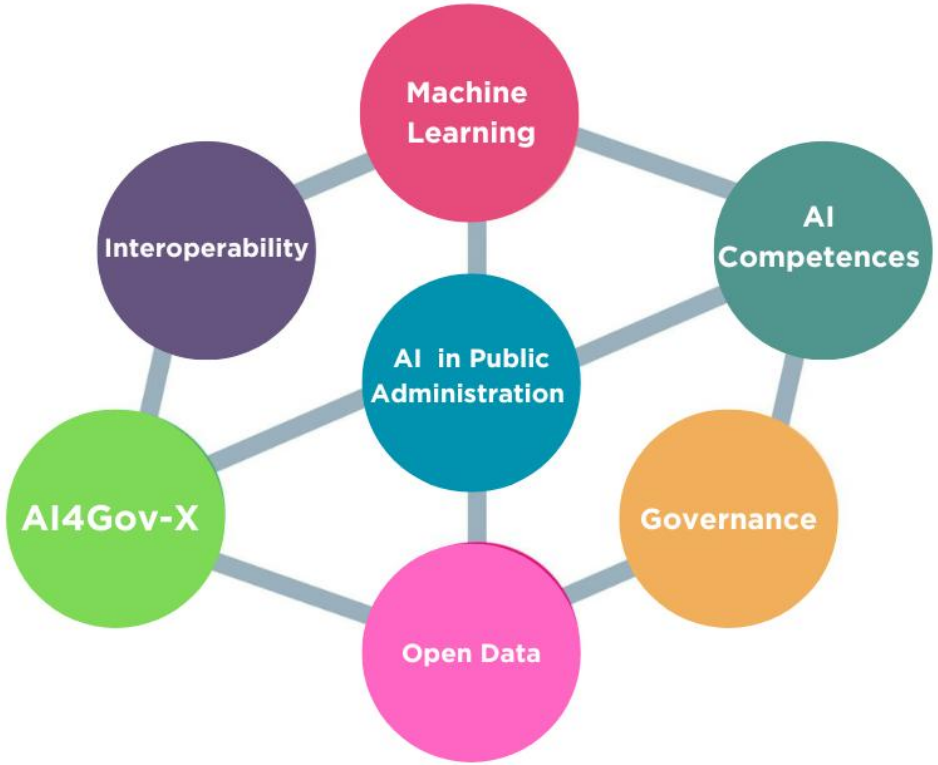
Delay means exponentially higher costs and worse outcomes

The Choice Is Clear

The countries that build AI infrastructure today will define the global economy for the next 50 years. Those that don't will become digital colonies, dependent on others for the basic tools of economic participation.

The question is not WHETHER to build public AI infrastructure

The question is whether we'll build it in time



Thank you for your attention

Miodrag Vujković

vujkovic@gmail.com